

Claims:

1. A method for treating a patient to reduce proliferation of and/or kill target cells that express an antigen, comprising

5 (a) administering one or more agents that cause apoptosis of the target cells; and

(b) administering an antibody immunoreactive with said antigen, and wherein said antibody is cytotoxic to said target cells.

2. The method of claim 1, wherein the target cells are transformed cells.

3. The method of claim 2, wherein the transformed cells are tumor cells.

10 4. The method of claim 1, wherein the treatment reduces the number of target cells in the patient.

5. The method of claim 1, wherein the agent that causes apoptosis and the antibody are administered to the patient conjointly.

15 6. The method of claim 1, wherein the antibody is administered to the patient after the agent that causes apoptosis.

7. The method of claim 1, wherein the antibody is administered to the patient prior to the agent that causes apoptosis.

8. The method of claim 1, wherein the one or more agents that cause apoptosis of the target cells is a chemotherapeutic agent.

20 9. The method of claim 1, wherein the antibody is a xenotypic monoclonal antibody.

10. The method of claim 9, wherein said xenotypic monoclonal antibody is selected from the group consisting of Alt-1, Alt-2, Alt-3, Alt-4, and Alt-5.
11. The method of claim 1, wherein the one or more agents that cause apoptosis and the antibody elicit an effective B and/or T cell response when administered to the patient.
12. The method of claim 11, wherein the effective T cell response is selected from the group consisting of a T helper response; a CTL response; and a T helper response and a CTL response.
13. The method of claim 1, wherein the patient is a human.
- 10 14. A packaged pharmaceutical for treating a patient to reduce proliferation of and/or kill target cells that express a antigen, comprising
 - (a) an antibody formulation immunoreactive with said antigen, which is accessible on target cells and said antibody formulation induces endocytosis of the target cell by an antigen presenting cell, and said antibody formulation is cytotoxic to said target cells; and
 - (c) instructions for using the antibody formulation in conjunction with a treatment that causes apoptosis of the target cells.
15. The packaged pharmaceutical of claim 14 further comprising one or more agents that cause apoptosis of the target cells.
- 20 16. The packaged pharmaceutical of claim 15, wherein the one or more agents that cause apoptosis of the target cells is a chemotherapeutic agent.
17. The packaged pharmaceutical of claim 15, wherein the one or more agents that cause apoptosis are formulated separately from the antibody formulation.

18. The packaged pharmaceutical of claim 15, wherein the one or more agents that cause apoptosis are formulated with the antibody formulation.
19. The packaged pharmaceutical of claim 14, wherein the antibody formulation is a xenotypic monoclonal antibody formulation.
- 5 20. The packaged pharmaceutical of claim 19, wherein said xenotypic monoclonal antibody formulation is selected from the group consisting of Alt-1, Alt-2, Alt-3, Alt-4, and Alt-5.
21. The packaged pharmaceutical of claim 14, wherein the target cell is a transformed cell.
- 10 22. The packaged pharmaceutical of claim 21, wherein the transformed cell is a tumor cell.
23. The packaged pharmaceutical of claim 14, wherein the one or more agents that cause apoptosis of target cells and the antibody formulation induce an effective B and /or T cell response in the patient.
- 15 24. The packaged pharmaceutical of claim 23, wherein the effective T cell response is selected from the group consisting of a T helper response; a CTL response; and a T helper response and a CTL response.
25. The pharmaceutical package of claim 14, wherein the antibody formulation is formulated at a dosage of about 100 µg/patient to about 2 mg/patient.
- 20 26. The pharmaceutical package of claim 14, wherein the antibody formulation is formulated at a dosage of about 0.1 µg/ml to about 200 µg/ml.
27. The pharmaceutical package of claim 14, wherein the antibody formulation is lyophilized.

28. A kit for treating a patient to reduce proliferation of and/or kill target cells that express a antigen, comprising

- (a) one or more agents that cause apoptosis of the target cells *ex vivo*;
- (b) an antibody formulation immunoreactive with said antigen, which is accessible on target cells and said antibody formulation induces endocytosis of the target cell by an antigen presenting cell, and said antibody formulation is cytotoxic to said target cells; and
- (c) instructions for treating target cells *ex vivo* with said one or more apoptotic agent(s) and administering treated target cells conjointly with said antibody formulation.

29. The kit of claim 28, wherein said kit includes a means for isolating target cells from a patient sample.

30. The kit of claim 29, wherein the means for isolating target cells from a patient sample comprises an affinity purification means selected from the group consisting of an antibody; a lectin; a His-tag sequence; and an enterokinase cleavage tag.

31. The kit of claim 28, wherein said kit includes a means for isolating dendritic cells from a patient sample.

32. The kit of claim 28, wherein said kit includes HLA-matched dendritic cells.

33. The kit of claim 28, wherein the antibody is a xenotypic monoclonal antibody.

20 34. The kit of claim 33, wherein the xenotypic monoclonal antibody is selected from the group consisting of Alt-1; Alt-2; Alt-3; Alt-4; and Alt-5.

35. The kit of claim 28, wherein the one or more agents that cause apoptosis of the target cells *ex vivo* is a chemotherapeutic agent.